

REMARKS

In the present Amendment, Claims 1, 11, 12 and 14 have been amended to recite "...a phenolic compound-oxidizing enzyme which can exhibit the/a desired deodorizing effect when lignin is present," Section 112 support for this amendment may be found, for example, in the second paragraph at page 8 of the specification. Claims 13, 19 and 20 have been cancelled without prejudice or disclaimer. No new matter has been added, and entry of the Amendment is respectfully requested.

Upon entry of the Amendment, Claims 1-3, 5-9, 11-12, 14-18 and 21-22 will be pending.

In paragraph No. 1 of the Office Action, the Examiner acknowledges the cancellation of Claims 3 [sic, 4] and 10 and withdraws the objections that were directed towards them.

Applicants respectfully submit that the Examiner's reference to the cancellation of claim 3, rather than claim 4, appears to be a typographic error, since the Examiner refers to Claim 3 in the rest of the Action.

In paragraph No. 3 of the Action, Claim 13 has been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Bolle et al (US 6,217,942).

As noted, Claim 13 has been cancelled. Accordingly, this rejection is deemed to be moot.

In paragraph No. 4 of the Office Action, Claims 1-3, 5-9 and 11-22 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Echigo et al (US 6,537,546) in view of Yamashita et al (US 6,780,403).

Applicants submit that this rejection should be withdrawn because Echigo et al and Yamashita et al do not disclose or render obvious the presently claimed invention, either alone or in combination.

In the Advisory Action, the Examiner asserts that “Applicants argue that Echigo et al do not teach the composition as claimed. The Examiner disagrees. Echigo et al teach a deodorant composition comprising phenolic compounds mixed with enzymes having polyphenol oxidizing activity. Since the composition is being used as a deodorant, perfumes, such, as those disclosed in Yamashita et al can be used in the composition of Echigo et al to arrive at the claimed invention.”

Applicants submit that Echigo et al disclose a process of increasing the molecular weight of phenolic compounds by allowing a polyphenol-oxidizing enzyme to act on phenolic compounds (such as lignin) to macromolecularize them, so that the phenolic compounds having increased molecular weight can be used as a deodorant. See, col. 3, lines 10-15 and 54, and abstract. In other words, a polymerized lignin, not a composition of polyphenol-oxidizing enzyme and lignin, forms the deodorant of Echigo et al.

In contrast, a composition comprising a lignin and a phenolic compound-oxidizing enzyme which can exhibit the/a desired deodorizing effect when lignin is present is being used as a deodorant in the present invention.

The enzyme of Echigo et al is used for polymerizing phenolic compounds, e.g. lignin, whereas the enzyme of Claims 1, 11, 12 and 14 which can exhibit the/a desired deodorizing effect when lignin is present is used for converting phenolic hydroxyl groups into the

corresponding quinone groups (see, page 19, lines 14-18 of the specification). It means that the use referred to in Claims 1 and 11, 12 and 14 implies a particular form of the substance.

Further, synergistic effects of the combined use of lignin and a phenolic-compound oxidizing enzyme are apparent from Examples 1 to 38 in the specification. Furthermore, the presently claimed deodorant composition has an effect of removing the bad odor emitted by lower fatty acids such as butyric acid and isobutyric acid (see, page 4, lines 5-9 of the specification), compared with the known compositions (see, page 3, lines 8-12 of the specification). Moreover, the presently claimed deodorant composition has an additional effect of giving off little or no foul odor derived from the substrate (see, page 8, lines 1 to 8 of the specification). Those unexpected results are not taught or suggested by Echigo et al. Yamashita et al is relied upon as teaching adding a perfume in a deodorant composition. Therefore, Yamashita et al does not make up for the deficiencies of Echigo et al.

In view of the above, reconsideration and withdrawal of the § 103(a) rejection of Claims 1-3, 5-9, 11-12, 14-18 and 21-22 based on Echigo et al '546 in view of Yamashita et al '403 are respectfully requested. As noted, Claims 13, 19 and 20 have been cancelled. Accordingly, the §103(a) rejection of Claims 13, 19 and 20 is moot.

Allowance is respectfully requested. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.114(c)
U.S. Application No.: 10/533,340

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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